

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **4****Complete if Known**

Application Number	10/715,339
Filing Date	11/17/2003
First Named Inventor	Woojin Lee
Group Art Unit	3733
Examiner Name	Pedro Philogene
Attorney Docket Number	HNMD-EA006

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1.	3,414,137		Fortin	12/1968
	2.	4,604,016		Joyce	8/1986
	3.	4,654,024		Crittenden et al.	3/1987
	4.	4,702,250		Ovil et al.	10/1987
	5.	4,750,475		Yoshihashi	6/1988
	6.	4,853,874		Iwamoto et al.	8/1989
	7.	4,941,454		Wood et al.	7/1990
	8.	5,072,361		Davis et al.	12/1991
	9.	5,084,054		Bencini et al.	1/1992
	10.	5,116,180		Fung et al.	5/1992
	11.	5,174,278		Babkow	12/1992
	12.	5,271,381		Ailenger et al.	12/1993
	13.	5,287,861		Wilk	2/1994
	14.	5,295,958		Shturman	3/1994
	15.	5,362,685		Klein et al.	1/1995
	16.	5,389,100		Bacich et al.	2/1995
	17.	5,398,691		Martin	3/21/1995
	18.	5,409,019		Wilk	4/1995
	19.	5,429,144		Wilk	7/1995
	20.	5,447,149		Kikawada et al.	9/1995
	21.	5,477,856		Ludquist	12/26/1995
	22.	5,480,422		Ben-Haim	1/1996
	23.	5,606,979		Hodgson	3/1997
	24.	5,618,294		Aust et al.	4/1997
	25.	5,626,553		Frassica et al.	5/1997
	26.	5,634,897		Dance et al.	6/1997
	27.	5,636,634		Kordis et al.	6/1997
	28.	5,667,476		Frassica et al.	9/1997
	29.	5,674,279		Wright et al.	10/1997
	30.	5,713,946		Ben-Haim	2/3/1998
	31.	5,738,096		Ben-Haim	4/14/1998
	32.	5,759,153		Webler et al.	6/1998
	33.	5,784,542		Ohm et al.	7/1998

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **2** of **4****Complete if Known**

Application Number	10/715,339
Filing Date	11/17/2003
First Named Inventor	Woojin Lee
Group Art Unit	3733
Examiner Name	Pedro Philogene
Attorney Docket Number	HNMD-EA006

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	34.	5,814,038		Jensen et al.	9/1998
	35.	5,827,313		Ream	10/1998
	36.	5,833,608		Acker	11/10/1998
	37.	5,833,658		Levy et al.	11/1998
	38.	5,843,076		Webster	12/1/1998
	39.	5,860,992		Daniel et al.	1/1999
	40.	5,861,024		Rashidi	1/1999
	41.	5,868,755		Kanner et al.	2/1999
	42.	5,928,248		Acker	7/1999
	43.	5,931,832		Jensen	8/1999
	44.	5,950,629		Taylor	9/14/1999
	45.	5,957,941		Ream	9/1999
	46.	5,964,717		Gottlieb et al.	10/1999
	47.	6,024,695		Taylor et al.	2/2000
	48.	6,080,170		Nash et al.	6/2000
	49.	6,083,170		Ben-Haim	7/4/2000
	50.	6,102,920		Sullivan et al.	8/2000
	51.	6,106,511		Jensen	8/22/2000
	52.	6,126,635		Simpson et al.	10/2000
	53.	6,132,368		Cooper	10/2000
	54.	6,132,441		Grace	10/2000
	55.	6,156,005		Theron	12/2000
	56.	6,171,234		White et al.	1/2001
	57.	6,179,856		Barbere	1/2001
	58.	6,221,070		Tu et al.	4/2001
	59.	6,233,476		Strommer	5/15/2001
	60.	6,236,432		Lee	5/2001
	61.	6,266,551		Osadchy	7/24/2001
	62.	6,267,781		Tu	7/2001
	63.	6,269,819		Oz et al.	8/2001
	64.	6,272,371		Ben-Haim	8/7/2001
	65.	6,283,921		Nix et al.	9/2001
	66.	6,290,675		Vujanic et al.	9/2001
	67.	6,292,681		Moore	9/2001

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 4

Complete if Known

Application Number	10/715,339
Filing Date	11/17/2003
First Named Inventor	Woojin Lee
Group Art Unit	3733
Examiner Name	Pedro Philogene
Attorney Docket Number	HNMD-EA006

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	68.	6,319,227		Mansouri-Ruiz	11/2001
	69.	6,332,889		Sancoff et al.	12/2001
	70.	6,352,503		Matsui et al.	3/2002
	71.	6,369,834		Zilles et al.	4/2002
	72.	6,370,411		Osadchy	4/9/2002
	73.	6,371,952		Madhani	4/16/2002
	74.	6,397,323		Yoshida	5/2002
	75.	6,398,755		Belef et al.	6/2002
	76.	6,485,489		Teirstein et al.	11/2002
	77.	6,569,084		Mizuno	5/27/2003
	78.	6,574,355		Green	6/3/2003
	79.	6,626,899		Houser	9/30/2003
	80.	6,645,196		Nixon et al.	11/2003
	81.	6,659,939		Moll	12/9/2003
	82.	6,669,687		Saadat	12/2003
	83.	6,702,826		Liddicoat et al.	3/2004
	84.	6,793,652		Whitman et al.	9/2004
	85.	6,858,003		Evans	2/22/2005
	86.	6,905,460		Wang	6/14/2005
	87.	6,936,056		Nash et al.	8/2005
	88.	6,963,792		Green	11/8/2005
	89.	7,090,683		Brock et al.	8/15/2006
	90.	7,214,230		Brock et al.	5/8/2007
	91.	7,297,142		Brock	11/20/2007
	92.	7,343,195		Strommer	3/11/2008
	93.	7,371,210		Brock	5/13/2008
	94.	2002-0087151		Mody et al.	7/2002
	95.	2003-0135204		Lee	7/17/2003

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **4** of **4**

Complete if Known

Application Number	10/715,339
Filing Date	11/17/2003
First Named Inventor	Woojin Lee
Group Art Unit	3733
Examiner Name	Pedro Philogene
Attorney Docket Number	HNMD-EA006

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T _n
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	96.	EP	0683016		D. J. I. Dr. Trippel Ingenieurges. mbH.	5/16/1995		
	97.	EP	0776738		SRI International	6/4/1997		
	98.	WO	93/14704		Andronic Devices Ltd.	8/5/1993		

OTHER DOCUMENTS -- NON PATENT LITERATURE

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	99.	Ikuta, et al., "Shape Memory Alloy Servo Actuator System with Electric Resistance Feedback and Application for Active Endoscope", 1988 IEEE, CH2555-1/88/000/0427-430 (16 Pages)	
	100.	M.W. Thring, "Robots and Telechirs: Manipulators with Memory; Remote Manipulators; Machine Limbs for the Handicapped", First published in 1983 by Ellis Horwood Limited (166 Pages)	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Alexandria, VA 22313-1450.